



IDAHO DEPARTMENT
OF HEALTH AND WELFARE

DIVISION OF
ENVIRONMENTAL QUALITY

9603-155-2

1410 North Hillon, Boise, ID 83706-1255, (208) 334-0502

Philip E. Batt, Governor

February 25, 1997

CERTIFIED MAIL #P 875 705 096

Bert Doughty, Environmental Manager
Thompson Creek Mining Company
P.O. Box 62
Clayton, Idaho 83227

RE: Thompson Creek Mining (Clayton; Molybdenum Mining Plant) - #9603-155-2
Tier II Operating Permit (#037-00001)

Dear Mr. Doughty:

The Department of Health and Welfare, Idaho Division of Environmental Quality (DEQ) originally received a Tier I Operating Permit (OP) application on September 29, 1995. The application was deemed complete on November 28, 1995. The Tier I OP application was superseded, however, on March 28, 1996, by the receipt of a Tier II OP application. On July 18, 1996, DEQ deemed the application complete.

On October 4, 1996, a proposed Tier II OP was issued for public comment. The public comment period was from October 18, 1996, through November 18, 1996. On November 18, 1996, DEQ received comments about the content of the proposed OP. These comments were addressed by DEQ in the response package.

Based on review of your application, state and federal rules and regulations, and comments received, DEQ finds this project meets the Provisions of IDAPA 16.01.01.400 (Rules for the Control of Air Pollution in Idaho). Therefore, enclosed is your Tier II OP (#037-00001) for the emission sources that exist at the facility.

You, as well as any other entity, may have the right to appeal this final agency action pursuant to the Idaho Department of Health and Welfare Rules, Title 5, Chapter 3, "Rules Governing Contested Case Proceedings and Declaratory Rulings," by filing a petition with the Hearings Coordinator, Department of Health and Welfare, Administrative Procedures Section, 450 West State Street - 10th Floor, Boise, Idaho 83720-5450, within thirty-five (35) days of the date of this decision.

Please be advised that this Tier II OP is subject to permit application fees of five hundred dollars (\$500.00) in accordance with IDAPA 16.01.01.470. IDAPA 16.01.01.470 became effective on March 7, 1995. Information regarding the permit application fees will be sent to you shortly.

If you have any questions regarding the terms or conditions of the enclosed permit, please contact Martin Bauer, Chief, Air Quality Permitting Bureau, at (208) 373-0502.

Sincerely,

Orville D. Green
Assistant Administrator
Air & Hazardous Waste

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Enclosure

cc: J. Johnston, Idaho Falls Regional Office
Source File COF

<p>STATE OF IDAHO AIR POLLUTION OPERATING PERMIT</p> <p>GENERAL INFORMATION</p>	<p>PERMIT NUMBER</p> <p>037 - 00001</p> <p>AQCR CLASS SIC</p> <p>063 A2 1061</p> <p>ZONE UTM COORDINATE (km)</p> <p>11 694 0 4912 0</p>		
<p>1. Permittee Thompson Creek Mining Company</p>			
<p>2. PROJECT Tier II Operating Permit</p>			
<p>3. ADDRESS P.O. Box 62</p>	<p>TELEPHONE# (208) 838-2200</p>	<p>COUNTY Custer</p>	
<p>4. CITY Clayton</p>	<p>STATE Idaho</p>	<p>ZIP CODE 83227</p>	
<p>5. PERSON TO CONTACT Bert Doughty</p>	<p>TITLE Environmental Manager</p>		
<p>6. EXACT PLANT LOCATION 2.5 Miles North of HWY 75 Between Thompson Creek and Squaw Creek</p>			
<p>7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS Molybdenum Mining</p>			
<p>8. GENERAL CONDITIONS</p> <p>This permit is issued according to the Rules for the Control of Air Pollution in Idaho, Section 16.01.01.400 and pertains only to emissions of air contaminants which are regulated by the State of Idaho and to the sources specifically allowed to be operated by this permit.</p> <p>THIS PERMIT HAS BEEN GRANTED ON THE BASIS OF DESIGN INFORMATION PRESENTED IN THE APPLICATION AND THE DEPARTMENT OF HEALTH AND WELFARE, DIVISION OF ENVIRONMENTAL QUALITY'S (DEQ) TECHNICAL ANALYSIS OF THE SUPPLIED INFORMATION. CHANGES IN DESIGN OR EQUIPMENT, THAT RESULT IN ANY CHANGE IN THE NATURE OR AMOUNT OF EMISSIONS, MAY BE A MODIFICATION. MODIFICATIONS ARE SUBJECT TO DEQ REVIEW IN ACCORDANCE WITH Section 16.01.01.200 OF THE Rules for the Control of Air Pollution in Idaho.</p>			
<p><i>David D. Green</i></p> <p>ASSISTANT ADMINISTRATOR DIVISION OF ENVIRONMENTAL QUALITY</p>		<p>ISSUED <u>FEBRUARY 25, 1997</u> DATE EXPIRES <u>FEBRUARY 25, 2002</u> DATE</p>	

AIR POLLUTION OPERATING PERMIT

Permittee AND LOCATION

Thompson Creek Mining Company
 Tier II Operating Permit
 Clayton, Idaho

PERMIT NUMBER

0	3	7	-	0	0	0	0	1
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The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Portable Crusher

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) from the portable crusher shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty (20) percent opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required in IDAPA 16.01.01.625. Opacity will be determined using DEQ's "Procedures Manual for Air Pollution Control".
- 1.3 Fugitive emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 651.

2. OPERATING REQUIREMENTS

- 2.1 Emission of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) from the portable crusher shall be reasonably controlled. Reasonable control may include, but is not limited to, the use of water sprays, or environmentally safe chemicals.
- 2.2 Hourly throughput rate of portable crusher shall not exceed eighty (80) tons per hour (T/hr).

3. MONITORING REQUIREMENTS

The Permittee shall record the hours of operation of the water sprays.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Section 3 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

AIR POLLUTION OPERATING PERMIT

Permittee AND LOCATION

Thompson Creek Mining Company
Tier II Operating Permit
Clayton, Idaho

PERMIT NUMBER

037 - 00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Primary (Gyratory) Crusher

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) from the Primary (Gyratory) Crusher shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty (20) percent opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required in IDAPA 16.01.01.625. Opacity will be determined using DEQ's "Procedures Manual for Air Pollution Control".
- 1.3 Fugitive emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 651.

2. OPERATING REQUIREMENTS

- 2.1 Daily throughput of the Primary (Gyratory) Crusher shall not exceed 78,000 tons per day (tpd).
- 2.2 Annual throughput of the Primary (Gyratory) Crusher shall not exceed 16,242,500 tons.

3. MONITORING REQUIREMENTS

The Permittee shall record the tons of material processed per day by the Primary (Gyratory) Crusher.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Section 3 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

480 100000 ThompsonCreek-2.PM

AIR POLLUTION OPERATING PERMIT

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Clayton, Idaho

037 - 00001

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SOURCE

Overland Conveyor Drive House

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) from the Overland Conveyor Drive House shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty (20) percent opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required in IDAPA 16.01.01.625. Opacity will be determined using DEQ's "Procedures Manual for Air Pollution Control".
- 1.3 Fugitive emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 651.

2. OPERATING REQUIREMENTS

- 2.1 Daily throughput of the Overland Conveyor Drive House shall not exceed 78,000 tons.
- 2.2 Annual throughput of the Overland Conveyor Drive House shall not exceed 16,242,500 tons.

3. MONITORING REQUIREMENTS

- 3.1 The Permittee shall record the tons of material processed per day by the Overland Conveyor Drive House.
- 3.2 Visible emissions, as determined using DEQ's "Procedures Manual for Air Pollution Control", shall be observed and recorded monthly.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

AIR POLLUTION OPERATING PERMIT

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Clayton, Idaho

PERMIT NUMBER

037 - 00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

East and West Ore Feeders

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) from the East and West Ore Feeders shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty (20) percent opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required in IDAPA 16.01.01.625. Opacity will be determined using DEQ's "Procedures Manual for Air Pollution Control".
- 1.3 Fugitive emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 651.

2. OPERATING REQUIREMENTS

- 2.1 Total daily throughput of the East and West Ore Feeders shall not exceed 40,000 tons.
- 2.2 Annual throughput of the East and West Ore Feeders shall not exceed 14,600,000 tons.

3. MONITORING REQUIREMENTS

The Permittee shall record the tons of material processed per day by the East and West Ore Feeders.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Section 3 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

Permittee AND LOCATION

Thompson Creek Mining Company
Tier II Operating Permit
Clayton, Idaho

037 - 00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Holoflite Dryer #1

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) from the Holoflite Dryer #1 shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty (20) percent opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required in IDAPA 16.01.01.625. Visible emissions shall be determined using DEQ's "Procedures Manual for Air Pollution Control".
- 1.3 Fugitive emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 651.

2. OPERATING REQUIREMENTS

Holoflite Dryer #1 shall process no more than 160 tons per day. Holoflite Dryer #1 shall process no more than 81,030 tons per year.

3. MONITORING REQUIREMENTS

- 3.1 Visible emissions, as determined using DEQ's "Procedures Manual for Air Pollution Control", shall be observed and recorded monthly.
- 3.2 The Permittee shall record the tons of material processed per day by Holoflite Dryer #1.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

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Clayton, Idaho

PERMIT NUMBER

0	3	7	-	0	0	0	0	1
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SOURCE

Holo-Flite Dryer #2 and Rotary Kiln -- Each has a separate venturi scrubber, and both are vented through a common stack

1. EMISSION LIMITS

- 1.1 Total suspended particulate (TSP) emissions from the lube grade dryer stack shall not exceed 0.05 grams per dry standard cubic meter (g/m³) as required in 40 CFR 60 Subpart LL, and the pound per hour (lb/h) value listed in Appendix A.
- 1.2 PM-10 (Particulate matter with an aerodynamic diameter less than a nominal ten (10) microns -- see 40 CFR 51.100) emissions from the lube grade stack shall not exceed the pound per hour (lb/h) and ton per year (T/y) values listed in Appendix A.
- 1.3 Hydrocarbon (HC) emissions from the lube grade stack shall not exceed the pound per hour (lb/hr) and ton per year (T/y) values listed in Appendix A.
- 1.4 Visible emissions from the lube grade stack shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required by IDAPA 16.01.01.625. Visible emissions will be determined using DEQ's "Procedures Manual for Air Pollution Control".
- 1.5 Fugitive emissions shall not be visible outside the building which houses this process as determined by EPA Reference Method 22.

2. OPERATING REQUIREMENTS

- 2.1 Emissions from the Holo-Flite and rotary kiln are each controlled by a venturi scrubber and then vented through a common stack (referred to here as the lube grade dryer stack) with an electrostatic precipitator.
- 2.2 Holo-Flite Dryer #2 shall process no more than 850 pounds of MoS₂ per hour. The rotary kiln shall process no more than 850 pounds of MoS₂ per hour.
- 2.3 The scrubbing liquid flowrate and pressure drop across the Holo-Flite's venturi scrubber shall not fall below the pressure drop measured during the most recent performance test. The scrubbing liquid flowrate and pressure drop across the Rotary Kiln's venturi scrubber shall not fall below the pressure drop measured during the most recent performance test.

3. MONITORING REQUIREMENTS

- 3.1 Monitoring requirements shall be in accordance with 40 CFR 60, Subpart LL.
- 3.2 The Permittee shall calibrate, maintain, and operate a monitoring device which continuously measures the change in pressure of the gas stream through the Holo-Flite dryer #2 and rotary kiln venturi scrubbers.
- 3.3 The Permittee shall calibrate, maintain, and operate a monitoring device, which continuously measures the scrubbing liquid flow rate to the Holo-Flite dryer venturi scrubber and rotary kiln venturi scrubber.
- 3.4 The Permittee shall record the pounds of material processed per day by the rotary kiln. The Permittee shall record the pounds of material processed per day by the Holo-Flite Dryer #2.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

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AIR POLLUTION OPERATING PERMIT

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Tier II Operating Permit
Clayton, Idaho

PERMIT NUMBER

037 - 00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Holo-Flite Dryer #2 and Rotary Kiln -- Each has a separate venturi scrubber, and both are vented through a common stack

3.5 The Permittee shall conduct an initial performance test to measure particulate matter emissions from the lube grade dryer stack, in grams per dry standard cubic meter (g/m³) using U.S. EPA Reference Method 5 (40 CFR 60, Appendix A) or an equivalent method approved by DEQ. U.S. EPA Reference Method 17 shall be used for determining the moisture content of the gas stream. This performance test shall consist of at least 3 runs of duration at least one hour each. The following shall be recorded during the performance test:

3.5.1 The operating process weight rates, in pounds per hour, for the Holo-Flite dryer and rotary kiln during each run. The process weight rate shall be calculated by dividing the amount of material processed for each operating shift by the actual hours of operation for that same shift, or by dividing the amount of material processed during each run of the performance test by the length of each run.

3.5.2 The change in pressure of the gas stream across the Holo-Flite dryer venturi scrubber and the rotary kiln venturi scrubber.

3.5.3 The scrubbing liquid flow rate to the Holo-Flite venturi scrubber and rotary kiln venturi scrubber.

3.5.4 Visible emissions from lube grade dryer stack as specified in DEQ's "Procedures Manual for Air Pollution Control".

3.6 Fugitive emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 651.

4. RECORDKEEPING AND REPORTING REQUIREMENTS

4.1 Recordkeeping and reporting requirements shall be in accordance with 40 CFR 60 Subpart LL.

4.2 The Permittee shall weekly record, on a weekly basis, the measurements of both the change in pressure across the scrubber and scrubbing flow rate for the Holo-Flite venturi scrubber and the rotary kiln venturi scrubber.

4.3 The Permittee shall submit semiannual reports to DEQ of occurrences when the measurements of pressure loss (or gain) and liquid flow rate differ by more than plus or minus thirty percent (30%) from the values given in Section 2.3 of this permit.

4.4 Scrubbing liquid flowrate and pressure drop across data from the most recent performance tests performed on the Holo-Flite and the rotary kiln venturi scrubbers shall be maintained on-site for the most recent five (5) years.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

AIR POLLUTION OPERATING PERMIT

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Clayton, Idaho

037 - 00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Jet Mill and the MoS₂ Packaging Area -- Each has a separate baghouse and is vented through separate stacks

1. EMISSION LIMITS

- 1.1 Total suspended particulate (TSP) emissions from the jet mill baghouse stack shall not exceed 0.05 grams per dry standard cubic meter (g/m³) as required by 40 CFR Subpart LL and the pound per hour (lb/h) value listed in Appendix A of this permit.
- 1.2 PM-10 emissions from the jet mill baghouse stack shall not exceed the pound per hour and ton per year limits in Appendix A.
- 1.3 Visible emissions from the jet mill baghouse stack shall not exceed seven percent (7%) opacity as required in 40 CFR 60.382(a)(2).
- 1.4 Total suspended particulate (TSP) emissions from the storage bin baghouse stack shall not exceed 0.056 grams per dry standard cubic meter (g/m³) as required by 40 CFR Subpart LL and the pound per hour (lb/h) value listed in Appendix A of this permit.
- 1.5 PM-10 emissions from the storage bin baghouse stack shall not exceed the pound per hour and ton per year limits in Appendix A.
- 1.6 Visible emissions from the storage bin baghouse stack shall not exceed seven percent (7%) opacity as required in 40 CFR 60, Subpart LL.
- 1.7 The Permittee shall not emit fugitive emissions from any part of the milling circuit which exhibit greater than 10 percent (5) opacity, as required in 40 CFR 60.382(b).

2. OPERATING REQUIREMENTS

- 2.1 The Jet Mill shall process no more than 1600 pounds of MoS₂ per hour.
- 2.2 Emissions from the jet mill will be controlled by a baghouse and vented through the jet mill baghouse stack. Emissions from the packaging of the finished product are minimized by being enclosed in a building. Fugitive particulate emissions generated from pneumatically conveying the lube grade MoS₂ into the ten ton storage bin shall be controlled by a baghouse and vented through the storage bin baghouse vent.
- 2.3 Fugitive emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 651.

3. MONITORING REQUIREMENTS

- 3.1 The Permittee shall record the average process rate, in tons per hour, of each operating shift. The process rate shall be calculated by dividing the amount of material processed for each operating shift by the actual hours of operation for that same shift.
- 3.2 The Permittee shall conduct performance tests to measure particulate matter emissions from the jet mill baghouse stack and storage bin baghouse stacks in g/m³ using U.S. EPA Reference Method 5 (40 CFR 60 Appendix A) or an equivalent method approved by DEQ. The following shall also be measured during the performance tests:

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

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AIR POLLUTION OPERATING PERMIT

Permittee AND LOCATION

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Tier II Operating Permit
Clayton, Idaho

P E R M I T N U M B E R

037 - 00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Jet Mill and the MoS, Packaging Area -- Each has a separate baghouse and is vented through separate stacks

3.2.1 Visible emissions from the baghouse stacks using U.S. EPA Reference Method 9.

3.2.2 The operating process weight rate (tons per hour) during each run of the performance test.

3.2.3 The change in pressure of the gas stream across the baghouses.

4. RECORDKEEPING AND REPORTING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Section 3.1 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

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AIR POLLUTION OPERATING PERMIT

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Clayton, Idaho

037 - 00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Super Fine Grade Molybdenum Production Circuit

1. EMISSION LIMITS

- 1.1 Particulate matter emissions from the mill feed bin shall not exceed 0.05 grams per dry standard cubic meter as required in 40 CFR 60, Subpart LL, nor shall they exceed 0.013 pounds per hour (lb/hr) or 0.028 tons per year (T/yr).
- 1.2 Particulate matter emissions from the "super fine" molybdenum storage bin shall not exceed 0.05 grams per dry standard cubic meter as required in 40 CFR 60, Subpart LL, nor shall they exceed 0.078 pounds per hour (lb/hr) or 0.17 tons per year (T/yr).
- 1.3 Visible emissions from each bin stack shall not exceed seven percent (7%) opacity as required in 40 CFR 60.382(a) (2).
- 1.4 The permittee shall not emit fugitive emissions from any portion of the milling circuit which exhibit greater than ten percent (10%) opacity as required in 40 CFR 60.382 (b).

2. OPERATING REQUIREMENTS

- 2.1 The maximum hourly conveying rate of any portion of the "super fine" molybdenum production circuit shall not exceed 0.065 tons per hour or 284 tons per year.
- 2.2 Equipment shall be installed, maintained and operated in good working condition, to continuously measure pressure drop across the particulate matter control devices on the mill feed bin and "super fine" storage bin.
- 2.3 Pressure drop across the particulate matter control devices shall not fall below the pressure drop measured during the performance.

3. MONITORING REQUIREMENTS

Pressure drop across the particulate matter control devices on the mill feed bin and "super fine" molybdenum storage bin shall be monitored and recorded weekly. These readings shall be maintained on-site for a period of five (5) years and made available to DEQ representatives upon request.

4. REPORTING REQUIREMENTS

- 4.1 The Permittee shall record, in a monthly report, the information requested in Section 3 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.
- 4.2 Pressure drop across data from the most recent performance tests performed on the particulate matter control devices on the mill feed bin and "super fine" molybdenum storage bin shall be maintained on-site for the most recent five (5) years.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

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AIR POLLUTION OPERATING PERMIT

Permittee AND LOCATION

Thompson Creek Mining Company
Tier II Operating Permit
Clayton, Idaho

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037 - 00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Pebble Lime Baghouse

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) from the Pebble Lime Baghouse stack shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty (20) percent opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required in IDAPA 16.01.01.625. Opacity will be determined using DEQ's "Procedures Manual for Air Pollution Control".
- 1.3 Fugitive emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 651.

2. OPERATING REQUIREMENT

The Pebble Lime Baghouse shall process no more than 6.5 tons of limestone per hour. The Limestone Storage Silo shall process no more than 5,000 tons of limestone per year.

3. MONITORING REQUIREMENTS

- 3.1 The Permittee shall record the tons of material processed per hour by the Pebble Lime Baghouse. This value shall be determined as follows:

$$\begin{aligned}
 \text{TPH}_{\text{EASTWEST}} &= \text{WT} \div \text{TIME} \\
 \text{where,} \\
 \text{TPH}_{\text{EASTWEST}} &= \text{tons per hour of material processed by the Pebble Lime Baghouse} \\
 \text{WT} &= \text{tons of material processed per operating shift;} \\
 \text{TIME} &= \text{actual hours of operation per operating shift}
 \end{aligned}$$

- 3.2 The Permittee shall record the actual hours of operation per operating shift of the Pebble Lime Baghouse.
- 3.3 The Permittee shall record the amount, in tons, of material processed by the Pebble Lime Baghouse.
- 3.4 Visible emissions, as determined using DEQ's "Procedures Manual for Air Pollution Control", shall be observed and recorded monthly.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1, 3.2, and 3.3 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

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EXPIRES: FEBRUARY 25, 2002

AIR POLLUTION OPERATING PERMIT

Permittee AND LOCATION

Thompson Creek Mining Company
Tier II Operating Permit
Clayton, Idaho

PERMIT NUMBER

037 - 00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Boiler #1 and Hot Oil Boiler #1

1. EMISSION LIMITS

- 1.1 Emissions of oxides of nitrogen (NO_x), particulate matter (PM), and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) from the Boiler #1 and Hot Oil Boiler #1 common stack shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Particulate emissions from the common stack shall not exceed 0.05 grains per dry standard cubic foot (corrected to 3% oxygen) when combusting oil as required in IDAPA 16.01.01.676 (Rules for the Control of Air Pollution In Idaho).
- 1.3 Visible emissions from the common stack shall not exceed twenty (20) percent opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required in IDAPA 16.01.01.625. Opacity will be determined using DEQ's "Procedures Manual for Air Pollution Control".

2. OPERATING REQUIREMENTS

- 2.1 Distillate (ASTM Grade #1 or #2) fuel oil burned shall not contain sulfur in exceedance of 0.3 percent by weight if grade #1 oil is used, or 0.5 percent by weight if grade #2 oil is used, as required by IDAPA 16.01.01.728.
- 2.2 Boiler #1 shall burn no more than 289,080 gallons of fuel oil per any twelve (12) month period. Hot Oil Boiler #1 shall burn no more than 118,260 gallons of fuel oil per any twelve (12) month period.

3. MONITORING REQUIREMENTS

- 3.1 The Permittee shall record the amount, in gallons, of fuel oil burned by each boiler each month. This amount, clearly specified for each boiler, shall be recorded in gallons to demonstrate compliance with Section 2.2 of this permit.
- 3.2 The Permittee shall monitor, or the supplier shall verify, the maximum sulfur content by weight of the fuel oil each time fuel oil is introduced into the fuel storage tanks. This information shall be recorded each time fuel oil is introduced into the fuel storage tanks.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

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AIR POLLUTION OPERATING PERMIT

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Tier II Operating Permit
Clayton, Idaho

PERMIT NUMBER

037 - 00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Motivator

1. EMISSION LIMITS

1.1 Emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) and oxides of nitrogen (NO_x) from the Motivator shall not exceed the corresponding emission rate limit listed in Appendix A.

1.2 Visible emissions shall not exceed twenty (20) percent opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required in IDAPA 16.01.01.625. Opacity will be determined using DEQ's "Procedures Manual for Air Pollution Control".

2. OPERATING REQUIREMENTS

2.1 Distillate (ASTM Grade #1 or #2) fuel oil burned shall not contain sulfur in exceedance of 0.3 percent by weight if grade #1 oil is used, or 0.5 percent by weight if grade #2 oil is used, as required by IDAPA 16.01.01.728.

2.2 The Motivator shall operate no more than 3,000 hours per year.

3. MONITORING REQUIREMENTS

3.1 The Permittee shall monitor, or the supplier shall verify, the maximum sulfur content by weight of the fuel oil each time fuel oil is introduced into the fuel storage tanks. This information shall be recorded each time fuel oil is introduced into the fuel storage tanks.

3.2 The Permittee shall record monthly the actual hours of operation of the Motivator.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

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AIR POLLUTION OPERATING PERMIT

Permittee AND LOCATION

Thompson Creek Mining Company
Tier II Operating Permit
Clayton, Idaho

PERMIT NUMBER

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The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Mill Auxiliary Generator

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) and oxides of nitrogen (NO_x) from the Mill Auxiliary Generator shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty (20) percent opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required in IDAPA 16.01.01.625. Opacity will be determined using DEQ's "Procedures Manual for Air Pollution Control".

2. OPERATING REQUIREMENTS

- 2.1 Distillate (ASTM Grade #1 or #2) fuel oil burned shall not contain sulfur in exceedance of 0.3 percent by weight if grade #1 oil is used, or 0.5 percent by weight if grade #2 oil is used, as required by IDAPA 16.01.01.728.
- 2.2 The Mill Auxiliary Generator shall operate no more than 500 hours per year.

3. MONITORING REQUIREMENTS

- 3.1 The Permittee shall monitor, or the supplier shall verify, the maximum sulfur content by weight of the fuel oil each time fuel oil is introduced into the fuel storage tanks. This information shall be recorded each time fuel oil is introduced into the fuel storage tanks.
- 3.2 The Permittee shall record monthly the actual hours of operation of the Mill Auxiliary Generator.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

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AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

Permittee AND LOCATION

Thompson Creek Mining Company
Tier II Operating Permit
Clayton, Idaho

037 - 00001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Pumpback Generator

1. EMISSION LIMITS

- 1.1 Emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM-10) and oxides of nitrogen (NO_x) from the Pumpback Generator shall not exceed the corresponding emission rate limit listed in Appendix A.
- 1.2 Visible emissions shall not exceed twenty (20) percent opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period as required in IDAPA 16.01.01.625. Opacity will be determined using DEQ's "Procedures Manual for Air Pollution Control".

2. OPERATING REQUIREMENTS

- 2.1 Distillate (ASTM Grade #1 or #2) fuel oil burned shall not contain sulfur in exceedance of 0.3 percent by weight if grade #1 oil is used, or 0.5 percent by weight if grade #2 oil is used, as required by IDAPA 16.01.01.728.
- 2.2 The Pumpback Generator shall operate no more than 500 hours per year.

3. MONITORING REQUIREMENTS

- 3.1 The Permittee shall monitor, or the supplier shall verify, the maximum sulfur content by weight of the fuel oil each time fuel oil is introduced into the fuel storage tanks. This information shall be recorded each time fuel oil is introduced into the fuel storage tanks.
- 3.2 The Permittee shall record the monthly hours of operation of the Pumpback Generator. The Permittee shall add the total monthly hours of operation for the calendar year in order to determine and record the total hours of operation per year of the Motivator.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall record, in a monthly report, the information requested in Sections 3.1 and 3.2 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

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AIR POLLUTION OPERATING PERMIT

Permittee AND LOCATION

Thompson Creek Mining Company
Tier II Operating Permit
Clayton, Idaho

PERMIT NUMBER

037 - 000001

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

APPENDIX A

THOMPSON CREEK MINING COMPANY - CLAYTON

EMISSION LIMITS^a -- HOURLY (lb/hr) OR DAILY (lb/day) AND ANNUAL^b (ton/yr)

EMISSION UNIT DESCRIPTION	PM			PM-10		NO _x		VOC	
	lb/hr	lb/day	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Portable Crusher, S-C2	3.42	-	15	-	-	-	-	-	-
Primary Crusher, S-C1	-	390	45.0	-	-	-	-	-	-
Conveyor Drive House, S-T1	-	93.6	12.0	-	-	-	-	-	-
East and West Ore Feeders, S-F1 & S-F2	-	48	8.8	-	-	-	-	-	-
Holoflite Dryer #1, S-D1	-	7.9	1.0	-	-	-	-	-	-
Pebble Lime Baghouse, S-PL1	0.14	-	0.5	-	-	-	-	-	-
Boiler #1 & Oil Heater (S-B1 & S-B2) Common Stack	0.11	-	0.5	-	-	0.93	4.07	-	-
Motivator, S-AX1	0.2	-	0.35	-	-	35.8	53.64	-	-
Mill Auxiliary Generator	0.6	-	0.14	-	-	8.2	2.05	-	-
Pumpback Generator	1.0	-	0.25	-	-	13.9	3.49	-	-
Lube Grade Dryer Stack (c)	0.025	-	0.111	0.025	0.111	-	-	2.6	10.3
Jet Mill Baghouse Stack	0.303	-	0.315	0.303	0.315	-	-	-	-
Storage Bin Baghouse	0.084	-	0.087	0.084	0.087	-	-	-	-
Mill Feed Bin	0.013	-	0.028	-	-	-	-	-	-
"Super Fine" Molybdenum Storage Bin	0.078	-	0.17	-	-	-	-	-	-
Total	37.173		87.451	0.412	0.513	58.83	63.25	2.6	10.3

- As determined by a pollutant specific promulgated U.S. EPA method, or DEQ approved alternative, or as determined by DEQ's emission estimation methods used in this permit analysis.
- As determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the actual hours per year that the process operates.
- Common stack for Holoflit Dryer #2 and rotary kiln.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

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OPERATING PERMIT GENERAL PROVISIONS

- A. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the **Rules for the Control of Air Pollution in Idaho**, and the Environmental Protection and Health Act, Idaho Code 39-101 et. seq.
- B. The Permittee shall at all times (except as provided in the **Rules for the Control of Air Pollution in Idaho**) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.
- C. The Permittee shall allow the Director, and/or his authorized representative(s), upon the presentation of credentials:
- 1) To enter upon the Permittee's premises where an emission source is located, or in which any records are required to be kept under the terms and conditions of this permit; and
 - 2) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and to require stack emission testing (i.e., performance tests) in conformance with state approved or accepted EPA procedures when deemed appropriate by the Director.
- D. Except for data determined to be confidential under Section 39-111, **Idaho Code**, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate regional office of the Division of Environmental Quality.
- E. Nothing in this permit is intended to relieve or exempt the Permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
- F. In the event of any change in control or ownership of source(s) from which the authorized emissions emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Director.
- G. This permit shall be renewable on the expiration date, provided the Permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within sixty (60) days after receipt of the Director's request shall cause the permit to be voided.
- H. The Director may require the Permittee to develop a list of Operation and Maintenance Procedures which must be approved by DEQ. Such list of procedures shall become a part of this permit by reference, and the Permittee shall adhere to all of the operation and maintenance procedures contained therein.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002

- I. Performance tests (i.e.; air emission source tests) conducted pursuant to testing requirements in this permit must be conducted in accordance with DEQ's **Procedures Manual for Air Pollution Control**. Such testing shall not be conducted on weekends or state holidays unless the Permittee obtains prior DEQ approval.

The Permittee shall submit a test protocol and a proposed test date for **each** performance test required by this permit to DEQ for approval at least thirty (30) days prior to each respective test date (including each test date for periodic tests such as, for example, annual tests). The Permittee shall promptly notify DEQ of any change in the proposed test date and shall provide at least five (5) working days advanced notice prior to conducting any rescheduled test, unless DEQ approves a shorter notice period.

Within forty-five (45) days of the date on which a performance test required by this permit is concluded, the Permittee shall submit to DEQ a performance test report for the respective test. The performance test report shall include any and all process operating data required to be recorded during the test period as well as the test results, raw test data, and associated documentation.

The maximum allowable source operating rate shall be limited to 120% of the average operating rate attained during the most recent performance test conducted pursuant to this permit which demonstrated compliance with the respective pollutant emission limit unless; (1) a more restrictive operating limit is specified elsewhere in this permit or; (2) at such an operating rate, emissions would exceed any emission limit(s) set forth in this permit.

- J. The provisions of this permit are severable; and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

ISSUED: FEBRUARY 25, 1997
EXPIRES: FEBRUARY 25, 2002